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Surgical Probe Follow-on to Fight Breast Cancer

A Silicon Valley start-up company has obtained a license to develop, produce and market an innovative diagnostic device for early breast cancer detection based on technology originally developed by NASA researchers.

San Jose-based BioLuminate, Inc. plans to develop a commercial version of the "Smart Surgical Probe" developed at NASA's Ames Research Center.

The probe is a small disposable needle with multiple sensors. It has the potential to enable physicians to diagnose tumors without surgery, dramatically reducing the number of breast biopsies that women undergo annually.

"This device is being developed to make real-time, detailed interpretations of breast tissue at the tip of the needle," said Robert Mah, the Ames scientist who invented the technology. "The instrument may allow health care providers to make expert, accurate diagnoses as well as to suggest proper, individualized treatment, even in remote areas," he said.

"Every week in the United States, almost 18,000 surgical breast biopsies are performed on women with suspicious breast lesions," explained BioLuminate Chief Executive Officer Richard Hular.



"By taking the NASA Smart Probe and developing it further, BioLuminate hopes to be able to produce a real-time-measurement instrument that will reduce the need for surgery. If we are successful, the probe will significantly improve women's health care and could potentially reduce annual health care costs," said Hular.

Further development of the smart surgical probe is focused on distinguishing cancer tissue types and obtaining real-time measurements.

"The probe uses special neural net software developed at Ames that learns from experience. This enables the instrument to detect the physiologic signs of cancer and may predict its progress," explained Mah.

The breast cancer tool is being developed in collaboration with Stanford University School of Medicine, Stanford, CA.

It is a spin-off from a computerized robotic brain surgery "assistant" previously developed by Mah and Stanford neurosurgeon Dr. Russell Andrews.

The larger brain surgery device is a simple robot that can "learn" the physical characteristics of the brain. It soon may give surgeons finer control of surgical instruments during delicate brain operations.

Happy Thanksgiving



NASA Program Helps Students Reach for the Stars

Students are exploring the stars with a click of a computer mouse thanks to a special hands-on, interactive NASA education program.

Telescopes In Education allows educators and students around the world to remotely control research-quality telescopes and charge-coupled device cameras located at the Mount Wilson Observatory in California. All they need is a computer modem and special astronomy software.

Telescopes In Education is sponsored by NASA's High Performance Computing and Communications Learning Technologies Program, the Office of Space Science, and the Office of Human Resources and Education.

Information on the program is available at: <http://tie.jpl.nasa.gov/>

New Office of Security Management and Safeguards Established

NASA has established a new organization, the NASA Office of Security Management and Safeguards, to focus and advance the agency's efforts in all aspects of NASA security.

The new office will formulate policy for and ensure the effectiveness of NASA's primary security objectives: to protect the agency's employees (including on-site contractors) and visitors, as well as its critical national assets, vital information and physical property. The new organization, which reports directly to NASA Administrator Daniel S. Goldin, will serve as the single point of focus on security matters for the agency and also will represent NASA at the national level on security policy.

"The creation of this office demonstrates, once again, our steadfast commitment to safety overall and also to properly safeguard the priceless human, intellectual and physical assets entrusted to us by the people of the United States," noted Goldin.

The establishment of the office results in part from assessments requested by Goldin to ensure the effectiveness of NASA's security programs in light of constantly evolving security and safety challenges.

John D. Schumacher, Associate Administrator for External Relations, will continue in his current capacity and also serve as acting director of the new office while a search to fill the position permanently is conducted.

A message from Center Director, Al Diaz:

Additional security measures implemented on Oct. 13, 2000, in response to increased tensions in the Middle East, which included the terrorist bombing of the U.S.S. Cole in Yemen, have been lifted in accordance with guidance received from NASA Headquarters.

Although we have returned to what we refer to as ThreatCon Normal, employees should continue to:

- ✓ conspicuously display their NASA/GSFC badge at all times while on Center property. Refer to GSFC Announcement #00-47, Subject: Mandatory Display of NASA/GSFC Identification Badge, dated Oct. 31, 2000.
- ✓ have their NASA/GSFC picture badge (as well as photo identification for employees who have temporary badges) ready to display to security officers at access gates.
- ✓ report any suspicious individuals, packages, or activity to their servicing Security Office.
- ✓ secure rooms and storage areas when not in use.

We appreciate your cooperation and patience during the past month of heightened security awareness and vigilance.

West Nile Virus

The District of Columbia and Delmarva have experienced a great deal of publicity concerning the West Nile Virus. Currently no cases of the virus have been reported on the Greenbelt or Wallops campuses.

Descriptions of the virus and its effects have been published in local newspapers, broadcast over radio and television stations. If you need additional information on the virus, contact the Health Unit, 1266 or refer to the Center for Disease Control at 1-800-311-3435.

Documentation indicates a significant number of bird deaths in the populations of American crows, blue jays and raptors. Domestic geese have been reportedly dying from West Nile Virus infection, however, the extent to which the virus may be present in wild ducks or geese is unknown. If you find a dead bird, **DO NOT TOUCH IT.** Notify the appropriate points of contact listed below:

At Wallops Flight Facility, call the Environmental Office at x1718.

At home in Virginia, call the Accomack County Environmental Health Department, 757-824-6211, or the Northampton County Environmental Services at 757-442-6228.

If at home in Maryland, call the Maryland Hotline at 1-888-584-3110.

You can reduce the risk of becoming infected with the West Nile Virus by following these steps:

- Stay indoors at dawn, dusk and early evening.
 - Wear long-sleeved shirts and pants when outdoors.
 - Apply an insect repellent to clothing and exposed skin.
 - Prevent standing, stagnant water from accumulating outside your home.
 - Dispose of cans and containers that have collected on your property, and drill holes in the bottom of them.
 - Clean roof gutters at least annually.
 - Empty wading pools when not in use, turn over wheelbarrows, and refresh birdbaths
- Use landscaping to eliminate standing water on your property.

Exchange News

One day guest membership and \$10 off membership coupons to Sam's Club are available in the Exchange. The coupons expire Jan. 31, 2001.

For Sale

1997 Jeep Grand Cherokee Laredo 50,000 miles. Very Good Condition Call (757) 824-4599 after 5 p.m.

From FEDweek Nov. 15 Issue

C Fund Falls From Lead

Another losing month in October brought the Thrift Savings Plan's common stock (C) fund down to a 6.01 percent return in the latest 12-month rolling count, the lowest of the three existing TSP funds.

The C fund, which long has been the highest-returning of the three TSP choices in those aggregate counts, dropped 0.4 percent in October while the bond (F) fund gained 0.66 percent for a 12-month return of 7.36 percent.

The C fund has had seven losing months during the period. The government securities (G) fund, meanwhile, gained 0.51 percent in October for a 12-month return of 6.51 percent.

The next edition of Inside Wallops will be Dec.4



Do Your Part For America -- Recycle

Wallops Flight Facility recycles several items which you may inadvertently be throwing in the trash.

Dumpsters for scrap metal are located in the salvage yard and behind Building F-10. Cardboard dumpsters are located at the Post Office and behind Receiving. Wooden pallets are collected in the salvage yard. White paper is collected in each office.



Aluminum cans are collected in most buildings by the Black History Club. Plastic bags are collected in the lobby of the Cafeteria. Packaging peanuts and bubble wrap can be recycled at Shipping.

The following items cannot be thrown in the trash: non-food liquids, batteries, florescent lightbulbs, solvent or oily rags, pressurized gas cylinders, asbestos or other hazardous materials. If you need to dispose of any of these items or have questions contact the Wallops Environmental Office at extension 1718.

Working Together



OHR and YOU

The Office of Human Resources (OHR) will be holding an open house for Wallops Civil Service employees from 11 a.m. to 2 p.m., Thursday, Nov. 30, in the Building F-3.

The purpose of the open house is for Human Resources staff to meet Wallops civil service employees and provide information on OHR programs and services.

Areas to be covered include labor relations, personnel profiles, leave and family work life programs, training and academic programs, employee express, recruitment and staffing, awards, employee assistance, organizational development services and career management programs.

If you have any questions call Sheri Brown at 66-2374 or Donna Swann at 66-2172.

November is Native American Heritage Month



Name That Tune! with Wallops' own Bob Tittle

November 29 at 6:30 p.m. in Building F-3

Get a team together or just show up and meet new people and form a team. Challenge your office mates! Challenge the next-door building occupants! Name those tunes from the 50's, 60's, and 70's. Bring back memories of where you were in 1956! 1964! 1974!

Prizes for the winning team!

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